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Note on Coggia's Comet. By J. M. Wilson and G. M. Seabroke.

Although it seems somewhat late to record further observations on this Comet, still we think the following Note may not be uninteresting to the Society. On the night of the 15th of July it will be recollected the Comet was seen shortly before midnight at its greatest splendour, at least it was so seen in our neighbourhood. Its tail could then be traced from near the horizon to nearly an altitude of 45°: this, expressed in real length, is not less than 20,000,000 miles. On the morning of the 22nd, at about one o'clock, we were looking over the northern horizon for any remains of the Comet that might be visible, when we clearly saw that the light near the horizon was brighter, and had a sharper outline than is usual on a summer's night. The light was not apparently concentric with the place of the Sun, but extended upwards in two not quite symmetrical branches, putting one in mind of a large bright fish's tail. The position of the boundary line of the light, as appears from our notes taken at the time, was as follows: "Its boundary line, which was rather sharply defined, stretched from *Cassiopeia* between *Perseus* and *Polaris* ($\frac{1}{3}$ of distance from former to latter) through *α Urs. Maj.* and *ε Urs. Maj.*, beyond which was cloud. The centre of curvature was between *Polaris* and *β Urs. Min.*; below this line there was light, and above darkness." This is shewn better by the drawing accompanying this Note. It would therefore appear that there was a light superposed on the usual glimmer of the horizon, and we can only ask, can this light have been the recurved extremity of the tail of the Comet, after the nucleus had descended far below the northern horizon? From the length of the tail on the 15th, and from the fact that it would nearly lie in a radius vector of the Earth's orbit, this seems possible.

We carefully examined the spectrum of the Comet on more than one night, and compared it with that given by the flame of a spirit lamp. The light of the flame being gradually brought into the field of the telescope, and its spectrum superposed on that of the Comet, by this method we could detect no want of coincidence in the positions of the bands. With the length of the slit in the direction of the length of the Comet, the band near "b" from the light of the leading portion of the Coma, seemed somewhat longer than the others, but whether this was due to its excess of brightness, or to an extension of the gas giving off that band in front of the Coma, was not at all certain. The bands were, as is usual with the spectrum of comets, sharply defined on the red side, and gradually shaded off towards the blue. They gradually increased in width and brightness towards the middle, where they were crossed by the continuous spectrum of the nucleus.

We submit with this note a drawing of the Comet, made by us on the night of the 14th of July at 10 to 10·15 P.M. with the $8\frac{1}{4}$-inch refractor. This may have some interest when compared

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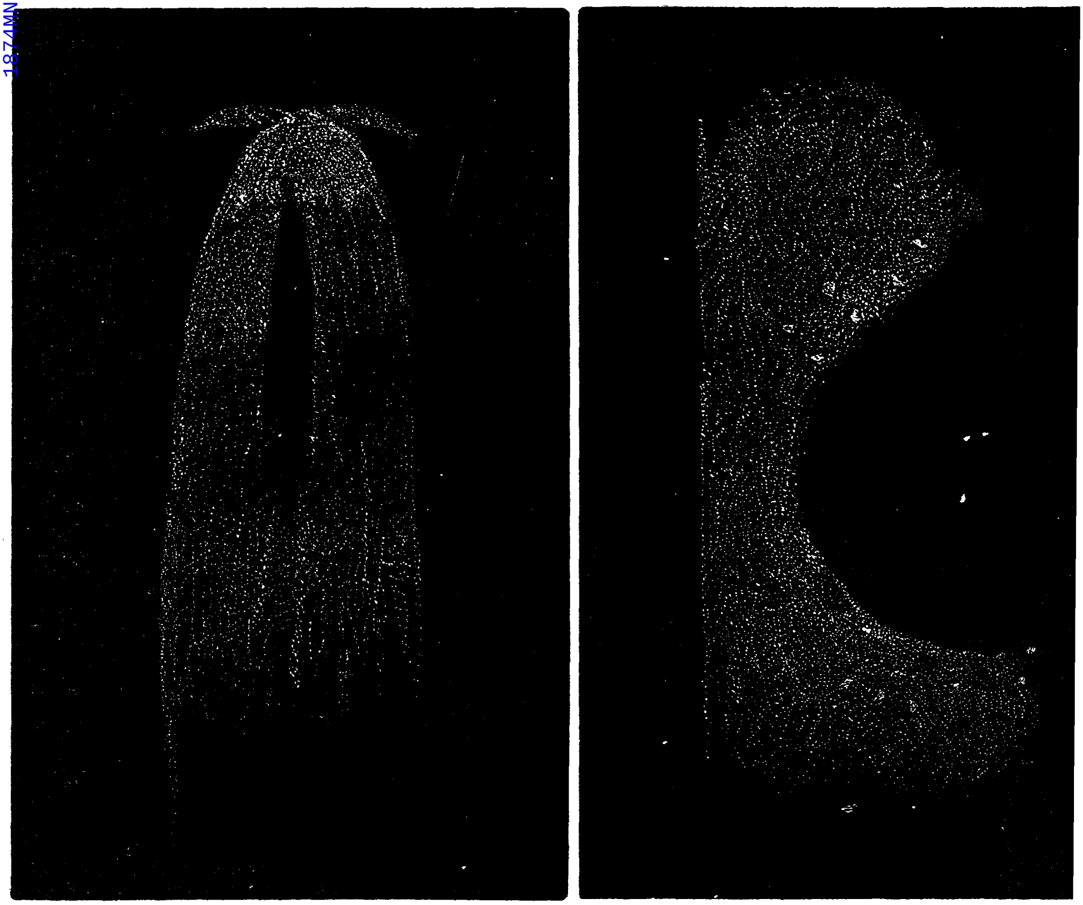
with others taken with greater apertures. It is worth adding that, to the one of us who first drew the Comet, the left-hand ear appeared distinctly brighter than the other, although to the other who observed it after the lapse of a quarter of an hour, no such difference was visible, and this change was corroborated afterwards by the first observer. The number of visitors prevented further observations on the variation of brightness. It was also thought by us that the Comet was reddish in colour.



Note on the Brightness of μ Draconis. By the Rev. Samuel J. Johnson.

Smyth and Webb have classed this star as mag. 4. On December 4, 1872, and December 8, 1873, I was therefore surprised to find it only of the faintest class visible to the unaided eye, say mag. 5 or $5\frac{1}{2}$, of the scale Smyth uses, and so it still remains. Are we to suppose an error in Smyth's and Webb's works? Or has any observer recorded a change in the star's lustre? *

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* The magnitude given in the B.A. Catalogue is 4, which is probably taken from that in Piazzi's Catalogue (Ed. 1814). Both Argelander and Heis give the magnitude 5-4, or equal to about 4·7.—[E. D.]

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